

REMARKS

The application has been reviewed in light of the Office Action dated July 12, 2004. Claims 1-29 are pending, with claims 1, 10, 19, 28 and 29 being in independent form. By this Amendment, claims 1, 10 and 19 have been amended to place the claims in better form for examination and to clarify the claimed invention, without narrowing the scope of the claimed invention.

Claims 1, 2, 5, 6, 8-11, 14, 15, 17-20, 23, 24 and 26-29 were rejected under 35 U.S.C. § 102(b) as purportedly anticipated by U.S. Patent No. 4,536,839 to Shah. Claims 3, 4, 7, 12, 13, 16, 21, 22 and 25 were rejected under 35 U.S.C. § 103(a) as purportedly obvious over Shah in view of U.S. Patent No. 6,708,248 to Garrett.

Applicant has carefully considered the Examiner's comments and the cited art, and respectfully submits that independent claims 1, 10, 19, 28 and 29 are patentable over the cited art, for at least the following reasons.

This application relates to arbitrating bus access requests which are (approximately) simultaneously placed by plural requesters. In any system having a bus through which functional units of the system connect to communicate with other functional units or access other resources in the system, there is generally a need for arbitrating bus access requests. That is, when each of multiple functional units requests access to the bus at approximately the same time, there is a need to resolve which one of the requesters is allowed to access the bus first, since

typically only one unit can access the bus at any given moment.

This application describes tools (in the form of apparatuses and methodologies) for arbitrating requests for bus access.

For example, independent claim 28 is directed to a method of bus arbitration comprising (i) storing a plurality of selection signals each designating a respective priority order for requests for bus access, (ii) providing the selection signals in a predetermined sequence, each selection signal being provided in response to a respective demand for arbitration between the requests for bus access, and the sequence in which the selection signals are provided designating a sequence of priority orders that are not fixed and differ from a round robin priority sequence, and (iii) arbitrating access to the bus for the requests for bus access in response to each demand for arbitration in accordance with the respective selection signal provided in response to the demand for arbitration.

Shah, as understood by Applicant, is directed to an arbitrator, in a multiprocessor system, for selecting one of plural microprocessors requesting access to a memory device.

Applicant finds no teaching or suggestion in Shah, however, of arbitrating bus access requests. It is submitted that one skilled in the art would also not find any such teaching or suggestion in Shah, since each of the buses referenced in Shah contains plural lines corresponding to respective microprocessors.

Garrett, as understood by Applicant, is directed to a memory

system with channel multiplexing of multiple memory devices. Garrett was cited in the Office Action as purportedly disclosing use of non-volatile storage.

Applicant does not find disclosure or suggestion by the cited art, however, of tools for arbitrating requests for bus access, as provided by the pending claims.


Accordingly, for at least the above-stated reasons, Applicant respectfully submits that independent claims 1, 10, 19, 28 and 29, and the claims depending therefrom, are patentable over the cited art.

If a petition for an extension of time is required to make this response timely, this paper should be considered to be such a petition. The Office is hereby authorized to charge any fees that may be required in connection with this amendment and to credit any overpayment to our Deposit Account No. 03-3125.

If a telephone interview could advance the prosecution of this application, the Examiner is respectfully requested to call the undersigned attorney.

Allowance of this application is respectfully requested.

Respectfully submitted,


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